strenuous efforts must be made to minimize all preventable causes of maternal death and disability.

Elsewhere in these pages, Hammond dramatically documents the persistent problem of massive obstetric hemorrhage. He identifies the patient at high risk as a multipara over the age of 30, and the significant preventable factor as inadequate blood or fibrinogen replacement too late in the course of bleeding. It is clear that several important therapeutic measures must be taken to minimize the risk of sudden massive blood loss from the gravid or puerperal uterus.

The safe administration of blood requires a complete crossmatch which in itself takes approximately two hours. This inevitable delay means that the need for blood must be anticipated. Blood must be ordered before the onset of significant hemorrhage. Foresighted obstetricians order blood for every patient at high risk when she is admitted to the labor suite. In addition a slow intravenous infusion through a large-bore needle or plastic cannula is begun before an emergency situation develops. Attempting to place an intravenous needle in a collapsed vessel is tedious and time consuming. While compatible blood is being prepared the patient's circulation can be maintained for a time by rapid intravascular infusion of isotonic solutions or plasma even in the presence of significant blood loss.

It is extremely important that all pregnant women have an antibody screen when first seen for prenatal care and again in the third trimester. Approximately 4 percent of women have atypical antibodies, a factor which often significantly limits the number of potentially compatible units of blood available. If these patients are identified in advance, a frustrating search for satisfactory blood replacement can be avoided. In areas where large stores of banked blood are not available, donors can be matched and be on call should an emergency arise.

The treatment of uterine atony after delivery of the placenta requires oxytocics and uterine massage. We must also realize that a uterus contracts poorly in the presence of hypotension when it is likely to be under-perfused with hypoxic blood. Uterine contractility will improve dramatically with the reversal of shock. Hammond also emphasizes the need for uterine exploration to remove placental fragments. These tissues prevent maximum uterine contraction, without

which immediate puerperal hemostasis cannot occur. Intrauterine exploration may require general anesthesia. Its omission in some of Hammond's cases suggests incomplete anesthesia coverage, a situation which plagues many obstetrical units throughout the United States.

A labor suite must provide for prompt blood replacement and meticulous maternal care. An ideal obstetrical unit must also have the capacity to perform major obstetrical surgical procedures (including cesarean section, uterine artery ligation and hysterectomy) and provide intensive cardiopulmonary resuscitation of the newborn. This total anticipation implies not only the frequent use of up-to-date machines to monitor maternal and fetal physiologic changes but also the constant presence of people trained to interpret and act upon the data. Furthermore the best people and the finest tools require efficient utilization to maintain peak effectiveness. In obstetrics each maternity unit must be examined critically to determine whether it meets advanced medical standards of management 24 hours a day. Smaller units in urban areas will have to be consolidated, while strategically placed centers in rural areas will require reinforcement and an efficient transport program for high risk patients. Considerable soul searching and objective analysis is required of interested physicians and hospital administrators to make these changes promptly and equitably. These necessary new arrangements are required for the maximum protection of the upcoming generations.

ALAN J. MARGOLIS M.D.
Professor
Department of Obstetrics and
Gynecology
University of California,
San Francisco

## Three Political Philosophies And Medical Care

IT HAS RECENTLY BECOME obvious that today there are three major political philosophies in America. While they overlap to some extent, they may be crudely separated out as conservative, liberal and what might be called protest. Each has its contribution to make to the melting pot of American political thought and each its contribution to the philosophy of medical and health care. Each has its advocates among physicians. And, as is usually the case with conflicting ideologies, there is something of value in each of them.

The conservative tradition in medicine is strong. It holds that there is always a reason for things being the way they are and they are probably best left the way they are unless there is clear evidence that change will bring improvement. In a sense this is an expression of the "do no harm" caveat in medicine. The conservative tradition also holds that health and health care are pretty much an individual responsibility as long as the individual is capable of exercising this responsibility. It also supports the principle of free enterprise in medical care with all that this implies.

The liberal tradition in medicine is also strong and deeply rooted. It holds that the benefits of medical and health care, like many other things, should be equally available to all, and that there is a responsibility for physicians to help bring this about through both personal and social action. This may be viewed as the positive counterpart of the long-standing position of the medical profession that no one should be without care who needs it. But liberalism in health care now goes further than this and undertakes to spread health care around in aggressive and occasionally forcible fashion by planning, programming and sometimes legislating the kind of health care that is thought best for those who are to receive it. All that this entails is becoming evident in the current experience with government programs and social action by others in the field of health care.

The new protest movement, hardly vet a tradition, appears to hold that the established order of things, with all of its free enterprise, planning, programs and legislation, has become much too cumbersome, rigid and unresponsive to human needs and now must undergo radical change. It is not yet clear just what the changes are to be or just what is to replace the established order that will be more responsive, but the thrust is there and it seems to be powerful. Already in health care we are beginning to see medical services being rendered outside of the traditional establishment environment in "free clinics" and other situations which are more in keeping with the culture, life-styles, habits and self-determined needs of those who are to be served than is the traditional doctor's office or hospital clinic. And lest it be forgotten, there is precedent in America for a successful protest against an unresponsive establishment. In the 18th century when the establishment proved too intransigent it was displaced by a new order of things. The medical establishment today is on test as we well know.

Each of these three political philosophies has contributed and will contribute more not only to the evolution of American political thought, but to the evolution of health care as well. Each philosophy is in obvious conflict with the others, but each has a point or two which should and must be preserved, strengthened and built into medical and health care as they evolve, we hope flexibly and responsively, in this nation. As far as medicine and the medical establishment are concerned, the energy and emphasis should be more upon realizing the positive values in each of these philosophies and less upon debating and battling over their inherent conflicts.

-msmw

## THE AGE INCIDENCE OF ACCIDENTS

Despite prevailing impressions to the contrary, there has never been sufficient evidence to warrant a conclusion that aged individuals who have no apparent disability or disease account for more than their share of accidents. Actually there are now enough studies available to show that the older worker, particularly the skilled worker, has in fact a smaller incidence of injury than a younger, inexperienced man. With respect to incidence of injury, sound judgment seems to be a more important factor than fast reaction times.

—DAVID T. PETTY, M.B., Chicago
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